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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,636	12/17/2003	Chi-Kuang Lai	09071.0004	3852
22852	7590	05/22/2006	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			VU, PHU	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,636

Applicant(s)

LAI, CHI-KUANG

Examiner

Phu Vu

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-8 and 17-20 have been considered but are moot in view of the new ground(s) of rejection presented below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-8, and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Numao 5103328.

Regarding claims 1 and 17, Numao teaches an LCD comprising: a backlight source (fig. 2 element 19) emitting light; an electro-optical light shutter (EOLS) (21) including a plurality of regions arranged in a pattern, an LCD panel (20) disposed to sandwich the EOLS with the backlight source and wherein the EOLS controls the light emitted from the backlight source to pass through the regions at specific display time intervals and the LCD receives the light emitted from the display backlight source (see fig. 6 (c)-(f)).

Regarding claims 2 and 18, Numao teaches the shuttering effect to pass regions in sequence (see fig. 6) by biasing the electrodes sequentially.

Regarding claim 4, Numao teaches the EOLS further comprising a first substrate (fig. 2 element 13), a first electrode layer (4a) on the first substrate further

comprising a plurality of transparent electrodes formed in parallel to each other, and a second substrate (15) opposing the first substrate, a second electrode layer on the second substrate (14) and a liquid crystal layer (5a) between the first and second electrode layers.

Regarding claim 6, Numao teaches LC layer being ferroelectric (see element 5a).

Regarding claims 7 and 8, Numo teaches first polarizer and second polarizers (13 and 14) on which the first and second substrates are disposed respectively.

Claim 3 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numao in view of Kaneko 6833887.

Regarding claims 3 and 19, Numao teaches all the limitations of claims 3 and 19 except using the EOLs to pass the regions at the same time and biasing the electrodes of the EOLS at the time. Kaneko teaches an EOLs element that passes light to each of its regions at the same time (see column 4 lines 40-50) to provide rapid response and high contrast. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to bias the electrodes at the same time such that light passes through each region of the shutter at the same time to provide high contrast and response.

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numao in view of De Zwart 4286266.

Regarding claims 4 and 20, Numao fails to explicitly disclose use of ITO as the electrode material. De Zwart teaches ITO as a conventional transparent electrode

material (column 3 lines 12-18). Conventionality has associative benefits such as proven and tested implementations. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to apply an ITO film to gain benefits of conventionality.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu Vu whose telephone number is (571)-272-1562. The examiner can normally be reached on 8AM-5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu Vu
Examiner
AU 2871


ANDREW SCHECHTER
PRIMARY EXAMINER